LANDSAT MONTHLY UPDATE

April 2003

The Landsat Program is managed by the U.S. Geological Survey under authority established by Presidential Decision Directive NSTC-3.

Program News

IGS Metadata

IGS metadata from Argentina, Australia, Brazil, Canada, China, Europe, Japan, and South Africa continue to be archived successfully. Maspalomas, Spain (MPS) began archiving their metadata at the USGS EDC on April 28, 2003. As of April 30, 2003, there were 19,572 L7 IGS subintervals archived for 302,512 Landsat 7 Worldwide Reference System (WRS) scenes.

Technical News

Data Validation

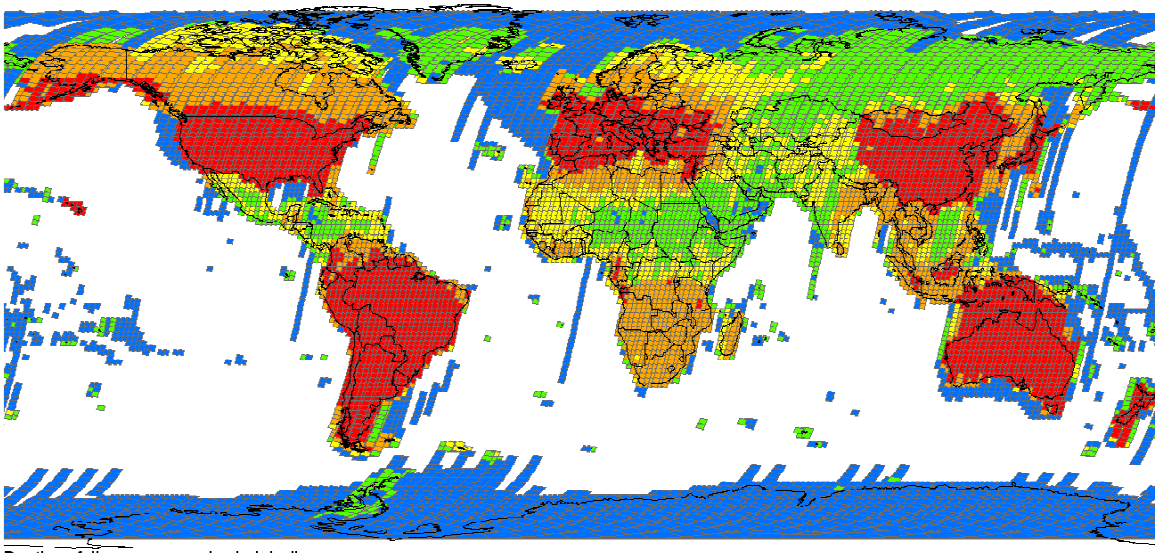
The Matera, Italy ground station provided the USGS with RCC data for biannual revalidation. These data were successfully revalidated and found to be of equivalent quality to the corresponding USGS data. The Hatoyama, Japan ground station provided the USGS with L0Rp for biannual revalidation and was also found to be of equivalent quality to the corresponding USGS data.

System tests (LAM 4.3.0) are currently under way and will conclude May 2003. This LAM release will allow the USGS to provide the IGS with subsetted RCC data on an operational basis. All IGS involved in the validation and exchange of RCC data will be provided with a subsetted RCC data within their acquisition circle to confirm that each IGS is able to extract, process and validate the USGS RCC data.

All L1G product data received from the IGS for preliminary testing has been analyzed and reported to each IGS. L1G products are expected from Brazil, Indonesia, Italy and South Africa for initial testing.

Landsat Coverage

Editor's Note: A number of inquiries have come in asking about the coverage extent of Landsat data. The following chart documents the extensive coverage collected as of April 2003. The color codes represent the number of acquisitions over areas. Future issues will provide updates of scenes acquired by the U.S. managed stations.



Daytime full scenes acquired globally
29 June 1999 through 30 April 2003

1 - 13 | 14 - 31 | 32 - 49 | 50 - 69 | 70 - 87

Revised Procedure & Calibration Parameters

Effective May 5, 2003, Landsat 5 TM data processed and distributed by the USGS EROS Data Center will be radiometrically calibrated using a new procedure and revised calibration parameters. The modified approach involved discontinuing use of the internal calibrator for the reflective bands (with the exception of the thermal band), implementing instead a time-dependent calibration look-up table

(LUT). This change will improve absolute calibration accuracy, data consistency over time, and consistency with Landsat 7 ETM+ data. It is expected that radiometric accuracy of 5 percent could be obtained with reprocessing of raw archival data with these lifetime calibration updates. The full implementation of these processing changes, will lead to a superior Landsat 5 TM data product that will be comparable to Landsat 7 ETM+ radiometry, and will provide the basis for continued long-term studies of the Earth's land surfaces.

Please contact Gyanesh Chander gchander@usgs.gov for extensive documentation on this matter

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The Landsat monthly update is an informal communication tool, prepared monthly and distributed electronically to USGS Landsat partners, to provide information about Landsat activities and related topics of interest. If you have any ideas, comments, corrections, or successes you would like to share with the Landsat community, please contact Ronald Beck, USGS Landsat team, at the following e-mail address: beck@usgs.gov.

U.S. Department of the Interior
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